

Square Root Equations II

Solve each equation. Remember to check for extraneous solutions.

① $3 = \sqrt{b - 1}$

② $2 = \sqrt{\frac{x}{2}}$

③ $\sqrt{-8 - 2a} = 0$

④ $\sqrt{x + 4} = 0$

⑤ $5 = \sqrt{r - 3}$

⑥ $\sqrt{2m - 6} = \sqrt{3m - 14}$

⑦ $\sqrt{8k} = k$

⑧ $\sqrt{9 - b} = \sqrt{1 - 9b}$

⑨ $\sqrt{3 - 2x} = \sqrt{1 - 3x}$

⑩ $\sqrt{3k - 11} = \sqrt{5 - k}$

~~11) $(20 - r)^{\frac{1}{2}} = r$~~

~~12) $(6b)^{\frac{1}{2}} = (8 - 2b)^{\frac{1}{2}}$~~

~~13) $\sqrt{56 - r} = r$~~

~~14) $\sqrt{10 + 7p} = p$~~

~~15) $(18 - n)^{\frac{1}{2}} = \left(\frac{n}{8}\right)^{\frac{1}{2}}$~~

~~16) $\sqrt{2v - 7} = v - 3$~~

~~17) $3 = (37 - 3n)^{\frac{1}{2}} - n$~~

~~18) $(-3 - 4x)^{\frac{1}{2}} - (-2 - 2x)^{\frac{1}{2}} = 1$~~

~~19) $x = 5 + (3x - 11)^{\frac{1}{2}}$~~

~~20) $2 = \sqrt{3b - 2} - \sqrt{10 - b}$~~